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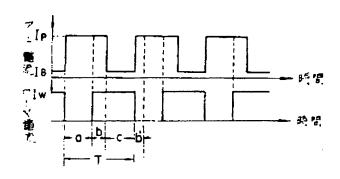
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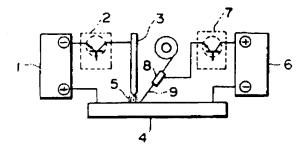
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TITLE

HOT WIRE SWITCHING WELDING

METHOD





ABSTRACT: PURPOSE: To adjust apparent arc width in the groove line direction, by using an arc current and a weld current to a filler core wire, as a pulse current which is switched to a high or low current level, adjusting both pulse currents in terms of phase, and oscillating an arc at a high speed.

> CONSTITUTION: A minus side output of an arc use electric power source 1 is connected to a W electrode (nonconsumable electrode) 3 through a transistor 2, and a TIG arc 5 is formed between the electrode and a base material 4. On the other hand, a plus side output of a wire use electric power supply 6 is connected to a contact chip 8 through a transistor 7, and an adding wire 9 which is in contact with the base material 4 is heated by a resistance. An arc current is constituted so as to be switched at a high speed by the transistor 2 to a peak current IP (period (a)+(b)) which becomes a large current, and a base current IB (period (c)) which becomes a low current, and a wire current is constituted so as to become a weld period (b)+(c) of a current IW and a nonconductive period (a) by the transistor 7. In this way, an arc 5 can be oscillated at a high speed.

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